# NAVFAC Risk Assessment Workgroup (RAW) Accomplishments

The NAVFAC Risk Assessment Workgroup was formed in June 2000 to address both Ecological Risk Assessment and Human Health Risk Assessment issues and to bring consistency across the Navy in how risk assessments are done in the Installation Restoration program through the exchange of information among the EFD/As. The group meets about three times a year and has regular attendance from NAVFAC, SWDIV, SOUTHDIV, LANTDIV, EFA NE, EFA Ches, and ESC with periodic attendance by PACDIV. We also have regular participation from CNO, NHEC, SSC and CECOS.

Since the formation of the workgroup, the following products have been completed and are available to RPMs and their contractors:

## I. COMPLETED PRODUCTS

#### A. ECOLOGICAL RISK ASSESSMENT (ERA):

- 1. Navy Guidance for Conducting Ecological Risk Assessments Website This web site provides detailed guidance on conducting ERAs and includes sections containing the Navy ERA Policy, issue papers, case studies, methods and tools and a calendar of ERA related events. This website is continually updated and new RAW products are posted as they are completed.
- 2. The following ERA Issue Papers were prepared by the RAW and can be found on the above Navy ERA Website:
  - ERA Standard Deliverables, Atlantic Division, NAVFACENGCOM
  - Guidelines for Evaluating Existing Analytical Data to Determine Suitability for Use in ERAs
  - Example Approach for the Development of Site-Specific Preliminary Remediation Goals (PRGs) for Protection of Ecological and Human Health at Navy Aquatic Sites
  - Environmental Negotiation Primer
  - Laboratory Detection and Reporting Limit Issues Related to Risk Assessments
  - Bioaccumulation in the ERAs
  - Analysis of PCB Congeners vs, Arcolors in ERAs (this issue paper is in the process of being updated to address Homologues as well)
  - Metals Bioavailibility in the Navy's Tiered ERA Process
  - Kriging for ERAs
  - Using Monte Carlo Analysis in ERAs
  - Specifying and Evaluating Quality Requirements for Analytical Chemistry in ERAs
  - Rapid Sediment Characterization (RSC) for ERAs in Sediments
  - Confounding Factors in Sediment Toxicology

- 3. The following ERA Case Studies were compiled by the RAW and can be found on the above Navy ERA Website:
  - Offshore ERA for Naval Fuel Depot Point Molate
  - Screening-Level Risk Assessment of Reserve Basin Sediments, Philadelphia Naval Complex, Pennsylvania
  - McAllister Point Landfill Marine ERA Report
  - Estuarine ERA for Portsmouth Naval Shipyard
  - Basewide IR Site Ecological Risk Screening, Naval Inventory Control Point Mechanicsburg, Pennsylvania
  - Basewide IR Site Ecological Risk Screening Food Web Model, Naval Support Station, Mechanicsburg, Pennsylvania
  - Supplemental Ecological Report (SER), Naval Air Warfare Center (NAWC), Trenton, New Jersey
- 4. The following ERA Methods and Tools were compiled by the RAW and can be found on the above Navy ERA Website:
  - ERA Models
  - Other Agency Guidance and Related Information
  - Ecological Benchmarks
  - Wildlife Exposure Factors
  - Data Quality Objectives (DQOs)
  - Bioavailibility
  - Toxicity Tests for Various Habitats and Media
  - Designing Biotic Surveys for Monitoring Programs

### B. HUMAN HEALTH RISK ASSESSMENT (HHRA):

# 1. Navy Guidance for Conducting Human Health Risk Assessments Website

This web site is setup the same as the ERA website and provides detailed guidance on conducting HHRAs. The web site includes sections containing the Navy HHRA Policy, issue papers, case studies, methods and tools and a calendar of HHRA related events. This website is continually updated and new RAW products are posted as they are completed.

- 2. The following HHRA Issue Papers were prepared by the RAW and can be found on the above Navy HHRA Website:
  - Dermal Contact with Soil
  - Dioxin
  - HHRA Scoping Documents Guidelines, Recommendations, and Examples
  - Overview of Screening, Risk Ratio, & Toxicological Evaluation Procedures for Northern Division HHRAs
  - Risk Communication

- Environmental Negotiation Primer
- Laboratory Detection and Reporting Limit Issues Related to Risk Assessments
- 3. The following HHRA Case Studies were compiled by the RAW and can be found on the above Navy HHRA Website:
  - Hunters Point Shipyard (Parcel F) Human Health Evaluation Work Plan
- 4. The following HHRA Methods and Tools were compiled by the RAW and can be found on the above Navy HHRA Website:
  - EPA Homepage
  - National Institute of Environmental Health Science (NIEHS) Homepage
  - National Center for Toxicological Research Homepage
  - Toxicology Data Network (TOXNET) web page
  - National Resource for Global Standards web site
  - EPA's Integrated Risk Information System (IRIS) web site
  - TOMES-PLUS System web site
  - Agency for Toxic Substances and Disease Registry (ATSDR) web site

#### C. GUIDANCE DOCUMENTS:

1. Guidance for Environmental Background Analysis, Volume 1: Soils

#### II. EFFORTS UNDER WAY:

#### A. GUIDANCE DOCUMENTS:

- Guidance for Environmental Background Analysis, Volume 2: Sediments a draft has been completed and reviewed. A final document is expected to be complete by 31 Dec 2002
- 2. Implementation Guide for Assessing and Managing Contaminated Sediments at Navy Sites A final document is expected to be completed by 31 Oct 2002 and posted to the ESC and NAVFAC Risk Assessment web sites by 15 Nov 2002.
- 3. EPA Guidance for Monitoring at Hazardous Waste Sites: Framework for Monitoring Plan Development and Implementation The RAW has been working with EPA to produce this EPA Guidance. A draft has been reviewed and a final document is expected 2<sup>nd</sup> quarter FY03.
- 4. Natural Resource Injury Guidance A draft document has been reviewed by the RAW. A final document is expected in FY03.

#### **B. ISSUE PAPERS:**

1. PCB paper(s) – NEHC is working on updating the existing PCB Issue Paper. Draft is due out for review 1<sup>st</sup> Qtr FY03

- Screening Process to Identify COPECs Associated with Sediment and Surface Water in the ERA Process – Draft is out for review. Expect completion by 2<sup>nd</sup> Qtr FY03 (pending funding)
- 3. EFA Ches Screening and Step 3a Process Final is expected to be posted to the ERA Web site by 31 Dec 2002.
- 4. Standard Operating Procedures for Conducting Lead HHRAs Final is expected to be posted to the ERA Web site by 31 Dec 2002.

#### C. OTHER NAVFAC SUPPORT:

- 1. R&D Support The RAW has been identified as a Functional Work Group and is working with Andy Del Collo to support the identification of Risk Assessment Y0817 needs and to provide an interface between the R&D Community and the Navy users. As a part of this effort, the RAW is looking at ways to work with the R&D community to improve the Risk Assessment Technology Transfer efforts
- 2. Coordination with other workgroups The RAW continues to coordinate efforts and support other workgroups. This includes coordinating with ARTT on the technology transfer efforts and reviewing Risk Assessment Software for the GIS Workgroup.

# III. PROPOSED EFFORTS FOR FY03 (Pending Funding):

#### A. GUIDANCE DOCUMENTS:

- 1. Develop Guidance for Environmental Background Analysis, Volume 3: Surface Water and Groundwater
- 2. Develop Navy –specific component or guidance for implementation of the EPA Guidance for Monitoring at Hazardous Waste Sites: Framework for Monitoring Plan Development and Implementation
- 3. Develop Bioavailability Guidance for Organics Looking at the possibility of working with the Tri-Services ERA Workgroup to produce this as a DoD Guidance.

#### **B. ISSUE PAPERS:**

Numerous issues have been identified for possible issue papers. Papers will continue to be developed as needed and as funding is available.